From: Gray, David
To: Coleman, Sam; Grantham, Nancy
Subject: Info
Date: Thursday, October 12, 2017 7:06:22 AM
Attachments: ARKEMA 114.pdf
6ENA.Valero Refinery-Texas, L.P.09.14.17.pdf

Sam – here is some information for you. We have informed the reporter that you cannot talk about pending enforcement activities at both Arkema and Valero. You will have to stick to information that has been made public.

As a reminder – there are a bunch of 3rd party lawsuits at Arkema brought forward last week and using 3rd party data. We have not seen it or been asked to review it. Our efforts were to help first responders and the state look at measurements outside the 1 mile evacuation area. We issued a statement about Valero (below) expressing our concerns. I have included both 114 letters for you.

Also, you will recall that the city of Houston Health Department staff took some early measurements near Manchester neighborhood and made statements primarily to the NYT about high benzene levels. There were concerns that these measurements were not reflective of the ambient levels of benzene in the community. Texas worked with the Mayor's office to issue a broader statement (below) about air quality in the neighborhood. There were a couple of phone calls with the city of Houston Health Department, EDF/California Team, EPA, State to coordinate and share information while everyone was assessing the situation. TCEQ also hosted a call with Environmental Advocates to talk more about these efforts.

All of our data is online at www.epa.gov/hurricane-harvey .

David

09/08/2017

Arkema Update

WASHINGTON (September 8, 2017) — The U.S. Environmental Protection Agency (EPA) has completed its response support to the Crosby Volunteer Fire Department and the Harris County Fire Marshal's Office for the catastrophic event at Arkema. The EPA and the TCEQ provided direct support to incident commander Michael Sims of the Crosby Volunteer Fire Department and Chief Bob Royall of the Harris County Fire Marshal's Office, who are leading a coordinated local, state, and federal effort as part of the Unified Command to control the fire at the Arkema facility in Crosby.

As a result of initial chemical fires while the facility was flooded, EPA has collected downstream surface water runoff samples at four locations outside the evacuation zone, near residential areas.

Six surface water runoff samples were collected on Friday, September 1, 2017 in the vicinity of the Arkema plant in Crosby, Texas. Surface water runoff results were less than the screening levels that would warrant further investigation. Each flood water sample was analyzed for volatile organic chemicals and semi-volatile organic chemicals likely to come from the Arkema plant. No volatile organic chemicals or semi-volatile organic chemicals were detected in the surface water runoff samples. Non-quantifiable and compounds not definitively identified are not reported. It is important to note that chemical analysis alone cannot be used as an indication of water safety. In a flood situation, there are multiple risk factors that can cause harm, industrial chemicals are only one of those risk factors. A copy of the data reports are attached.

EPA also sent its aerial surveillance aircraft to test resulting smoke from the fires at Arkema EPA's plane instrumentation is capable of measuring 78 different chemicals, including peroxides.

The Airborne Spectral Photometric Environmental Collection Technology (ASPECT) aircraft found no exceedances of the Texas comparison values. ASPECT conducted a screening level assessment to evaluate the unreported or undetected releases of hazardous materials or contaminants at the Arkema plant in Crosby, Texas from August 30, 2017 through September 7, 2017. The screening level results from ASPECT were compared to the ASPECT list of Texas Commission on Environmental Quality (TCEQ) short-term Air Monitoring Comparison Values (AMCVs) and found no exceedances of the short-term AMCVs. In addition, the ASPECT was requested to monitor for peroxide which was the source material for the fire. A copy of the ASPECT report is attached.

The TCEQ has an open investigation into the Arkema incident that will include an evaluation of any impacts due to the fires at the site. Additionally, after the final notifications are received, the TCEQ will evaluate the reported emissions events to determine compliance with applicable rules, permit provisions, and notification and reporting requirements. The TCEQ and Harris County Pollution Control are coordinating post-event monitoring, sampling, and complaint response activities. EPA has ordered Arkema to provide a detailed timeline of events and to respond within 10 days to questions about the handling of organic peroxides, which are combustible if not kept refrigerated, the amount of chemical materials, and the measures taken in advance to guard against flooding and loss of electricity. The U.S. Chemical Safety Board has initiated an investigation at the Arkema plant in Crosby.

For more information regarding Arkema, please visit:

https://www.tceq.texas.gov/news/statement/statement-on-arkema-investigation
https://response.epa.gov/sites/12353/files/Arkema_Surface_Water_VOCs_20170901.pdf
https://response.epa.gov/sites/12353/files/Arkema_Surface_Water_SVOCs_20170901.pdf
https://response.epa.gov/sites/12353/files/Arkema_ASPECT_Detections_20170907.pdf

Air Monitoring – Southeast Houston, Manchester Community

EPA has concluded that the probable source of elevated benzene and VOC readings in the Manchester community in Houston was the roof failure and spill from a light crude storage tank at the Valero Houston Refinery during Hurricane Harvey. EPA investigation into Valero Houston Refinery response and cleanup activities will continue. EPA has a long-standing practice of not disclosing specific details regarding on-going investigations. However, the complete results of our investigation will be made public upon its conclusion.

Following the review of air monitoring data from EPA's mobile unit and the City of Houston, EPA sent air specialists to the refinery on September 8 to evaluate the incident. Utilizing an infrared camera, EPA identified moderate on-going releases from the 190-foot wide tank. Valero reported to EPA that it was removing residual crude material from the tank using pumps and evaluating safe methods for removing the crumpled roof from the tank.

In addition, Valero has informed EPA that it believes it significantly underestimated the amount of VOCs and benzene released in its original report to the State of Texas Environmental Electronic Reporting System. Based upon the volume of material in the tank at the time of the roof failure, EPA estimates that the emissions from the tank were highest immediately following the roof failure and have diminished over time due to efforts by the company to remove tank contents and apply foam suppressant to minimize emissions. Valero has informed EPA and TCEQ that they are preparing a follow up report that will indicate as substantial increase in overall reported emissions from the event.

EPA/TCEQ/CITY OF HOUSTON HARVEY UPDATE: AIR MONITORING DATA RELEASED

EPA's mobile laboratory, using the trace atmospheric gas analyzer and commonly called

TAGA, is a triple quadrupole mass spectrometer system, extensively monitored the neighborhood adjacent to the Valero refinery in southeast Houston. To date, no levels of targeted toxic chemicals were detected above the Texas TCEQ Air Monitoring Comparison Values (AMCV) short-term screening levels. Copies of the TAGA results are attached.
EPA continues to conduct ambient air monitoring in Houston, and is focusing on an area of potential concern associated with reported air emissions from a Valero facility in Houston to identify the possible source of emissions. EPA has been on-scene conducting real-time air monitoring near the facility and continues to investigate complaints in the area.
EPA conducted an inspection of the Valero facility on Monday, September 5, 2017, confirmed that a tank at the facility did have a leak which occurred on August 26, 2017 from the Hurricane Harvey storm and flooding. EPA also confirmed Valero had taken action to respond to and repair the leak. Based on current site conditions including weather, repair actions by Valero, and air monitoring results, EPA's inspection could not confirm the tank was the source of the air release that led to complaints in the area immediately after the storm. EPA's air monitoring performed onsite and around the facility on September 5 does not indicate levels of concern for the community. EPA will continue air monitoring for additional sources in the area.
The Trace Atmospheric Gas Analyzer (TAGA) is a self-contained mobile laboratory capable of real-time monitoring and sampling/analysis of outdoor air or emissions. The instrumentation refers both to the analytical instrument and the mobile laboratory built around it. The instrumentation aboard a TAGA mobile laboratory includes: A TAGA mass spectrometer/mass spectrometer (MS/MS), which provides real-time monitoring for many organic and inorganic compounds at the part-per-billion by volume (ppbv) levels or lower. An Agilent gas chromatograph/mass spectrometer (GC/MS), which analyzes volatile organic compounds at the ppbv level or lower in air samples collected in Tedlar® bags using a loop injection system. A global positioning system (GPS), which supplies accurate, real-time positional data during mobile monitoring or stationary events.
https://response.epa.gov/sites/12353/files/TAGA_Results_analyzed20170905.pdf
https://response.epa.gov/sites/12353/files/TAGA_Results_analyzed20170906.pdf